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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/350,251	07/08/1999	ARYE MALEK	6139.059US1	7789

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EXAMINER

NGUYEN, JOHN QUOC

ART UNIT	PAPER NUMBER
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3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/350,251

Applicant(s)

MALEK ET AL.

Examiner

John Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-10, 12-25 and 27-51 is/are pending in the application.
- 4a) Of the above claim(s) 22-25, 31-36, 41, 44 and 47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-10, 12-21, 27-30, 37-40, 42, 43, 45, 46, 48-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Applicant's election of the species of figs. 19A and 19B, claims 3-10, 12-21, 27-30, 37-40, and 42 in Papers No. 27 and 29 has been acknowledged. Claims 22-25, 31-36, 41, 44, and 47 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Papers No. 27 and 29.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the tray height, the length side, and the width side must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 21, 49, 51 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21, it is not clear how the "longer side" is related to the "length side".

In claim 49, it is not clear how the "long-dimension side" is related to the "length side".

For clarity and/or definiteness, it appears that "is" (claim 51, line 2) should be --are--.

All claims should be revised carefully to correct all other deficiencies similar to the ones noted above. The non-elected claims should also be similarly corrected at the same time so that the application can be allowed without delay should the generic claims become allowable.

Claims 3-9, 12-21, 27-30, 40, 42, 43, 45, 46, and 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Jackson et al (US 6139243), Kawasaki (US-4468165), and Hinchcliffe et al (US-4303366).

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The admitted prior art discussed on pages 2-5 of the specification discloses substantially all the claimed features including vision inspection systems, trays of devices to be inspected, flipping the trays to inspect both sides of the devices, mechanical translation devices. What is not disclosed is a motor-operated flipping/inverting mechanism. Jackson et al discloses another similar apparatus in which the claimed inverting means is disclosed including translation devices/conveyors 56 and flipping/inverting devices 20 (or 70) with jaws such as 50 and 107, which invert the devices in the trays¹² between first and second processing stations 22 and 26. Means for limiting the motion of the rotator are deemed inherent since the rotators only rotate a predetermined amount. It would have been obvious to a person having ordinary skill in the art to provide the admitted prior art apparatus with an inverting mechanism as taught by Jackson et al to automatically and reliably invert the devices in the trays. It is deemed inherent that the admitted prior art has the inverting done in between two inspection stations so that both sides are inspected or it would have been obvious to a person having ordinary skill in the art to provide the inverting device in between two inspection/processing stations as taught by Jackson et al. Relative to claim 51, both the admitted prior art and Jackson et al teach the claimed features. The admitted prior art also does not show the orientation of the trays while moving. However, moving the trays along a direction perpendicular to the long side such as to fit more trays on the conveying means is old and well known in the art as evidenced by Kawasaki (note at least trays 22) and Hinchcliffe et al (note at least trays 14); therefore, It would have been obvious to a person having ordinary skill in the art to

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move the trays of the admitted prior art modified as above along a direction as taught by Kawasaki or Hinchcliffe et al to fit more trays on the conveying means. It is deemed inherent that the second inspection station is movable with respect to the inverting mechanism and the means for moving includes structures such as releasable screws and fastening devices or alternatively to provide the second inspection station with such means for moving would have been obvious to a person having ordinary skill in the art to adjust the position of the second inspection station to suit the particular configuration of the trays or devices to be inspected. The trays of the admitted prior art are deemed to be the old and well known trays (with short height) with single layer devices as shown by Jackson et al or, alternatively, the use of trays and single layer as taught by Jackson et al would have been obvious to a person having ordinary skill in the art to reduce space requirement (shorter height trays take up less space than taller ones). Relative to claim 49, the spacing between the inspection stations would have been an obvious matter of design choice to a person having ordinary skill in the art based on factors such as preference, design criteria (such as dependent on the size of the inspection station or of the devices to be inspected, or on the presence of other apparatus in between), space optimization, and costs. Relative to claim 50, that the rotation axis is not parallel to the direction of movement of the tray would have been an obvious matter of design choice to a person having ordinary skill in the art based on factors such as preference, design criteria, space optimization, and costs, providing no new or unexpected results.

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Claims 10 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Jackson et al, Kawasaki, and Hinchcliffe et al as applied to claims 3-9, 12-21, 27-30, 40, 42, 43, 45, 46, 48-51 above, and further in view of Bilodeau et al (US 5691810).

Bilodeau et al discloses another similar apparatus in which a pick and place mechanism 42 removes rejected devices and replaces them with good devices. It would have been obvious to a person having ordinary skill in the art to provide the admitted prior art modified as above with a pick and place mechanism as taught by Bilodeau et al to remove rejected devices and replace them with good devices to obtain a all-good tray and reducing manual labor and manufacturing time and costs. Relative to claim 39, the number of inspection stations is deemed inherent in the admitted prior art or, alternatively, would have been an obvious matter of design choice to a person having ordinary skill in the art based on factors such as the number of features to be inspected.

Applicant's arguments filed 12/4/06 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

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the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Kawasaki and Hinchcliffe et al directly teach moving the trays in a direction perpendicular to the long dimension side. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Substantially all of applicant's arguments are only valid if and only if the following were claimed: 1. That all the trays on the conveyor/transfer mechanism are touching end-to-end all the time, and 2. That a particular number of trays must be present between the 1st and 2nd stations. For example, if it is required that 10 trays be between the 1st and 2nd stations end-to-end and assuming each tray is 20-inch long and 8-inch wide, then sure, positioning the trays to move along the shorter 8-inch dimension would make positioning the 2nd station only 80 inches (10X8) from the 1st station possible, as opposed to 200 inches (10X20). However, no such limitations are recited in the claims. Without such limitations in the claims, applicant's arguments are analogous to the travel distance between two cities as previously advanced.

All other arguments have been addressed in the rejection and/or comments above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

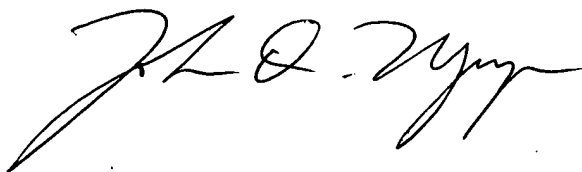
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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Q. Nguyen whose telephone number is (571) 272-6952. The examiner can normally be reached on Monday-Friday, from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'J. Q. Nguyen', is written over a horizontal line.

John Q. Nguyen
Primary Examiner
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